

Achieving Cost Savings Through
Pharmaceutical Utilization
Management (PUMP)

ashp Consulting
Improve Outcomes. Maximize Results. Deliver Better Patient Care.

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Evolution of Pharmaceutical Utilization Management

- St. John Health System – 1998-2000
 - Vision 2000: Pharmacy and Drug Therapy Management Initiatives
- MUSC Medical Center – 2000-2010
 - Pharmaceutical Outcomes Management Program
- Duke University Health System – 2010-present
 - Pharmacy Utilization Management Program






Discussion Points

- Strategy to optimize the supply chain and utilization
- Structures and resources required for success
- Gaining organizational commitment
- Tracking, reporting and communicating
- Impact on organizational quality and efficiency



About Duke University Health System (DUHS)


- Duke University Hospital
 - Tertiary and Quaternary Care
 - Level 1 Trauma Center
 - National Cancer Institute
 - 979 Inpatient Beds
 - Over 43,000 Admissions (FY19)
- Duke Regional Hospital
 - 369 Inpatient Beds
 - Over 17,000 Admissions (FY19)
- Duke Raleigh Hospital
 - 186 Inpatient Beds
 - Over 9,600 Admissions (FY19)

Center for Medication Policy


- Collects, analyzes, and disseminates medication use information across DUHS
- Collaborates with multidisciplinary groups to influence policies for the purpose of positively impacting patient care
- Integrates activities with departmental clinical, safety, informatics, administrative, procurement and drug distribution systems

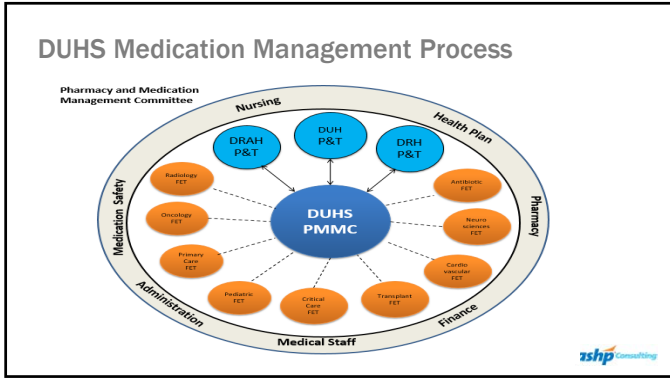
Formulary Management **Medication Utilization Evaluations** **Research and Teaching**
Medication Policy Oversight **Drug Shortages** **Clinical Decision Support**
DI Consult Service **REMS Program Management** **Drug Info References**
PUMP Project Management



Medication Management Process

- **Formulary Evaluation Team (FET) Model**
 - Subcommittee to the health system P&T (DUHS PMMC)
 - Medication Policy pharmacist serves as the FET Facilitator
 - Co-Chairs
 - Clinical pharmacist
 - Attending-level physician (serves as voting member of health system P&T)
- **Functions**
 - Meets on at least a quarterly basis
 - Recommends formulary decisions based on individual drug or class reviews
 - Develops or reviews guidelines to promote best practices
 - Completes MUEs to optimize medication use process across DUHS



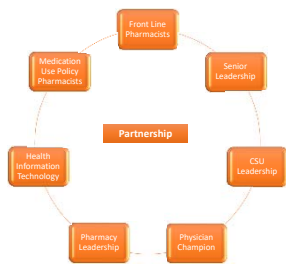


What is PUMP?

- Duke University Health System PUMP
 - P: Pharmaceutical
 - U: Utilization
 - M: Management
 - P: Program
- Program Goals
 - Improve the medication use process across the health system
 - Assess opportunities to reduce pharmaceutical costs
 - Drug Pricing
 - Operations
 - Formulary Management



PUMP Participation




Three Core Questions for PUMP

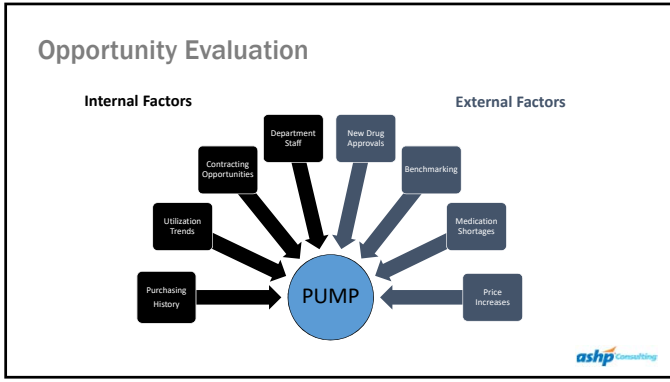
- Drug Pricing:
 - How much are we paying?
- Operations:
 - How much are we buying?
- Formulary Management:
 - How do we use this?

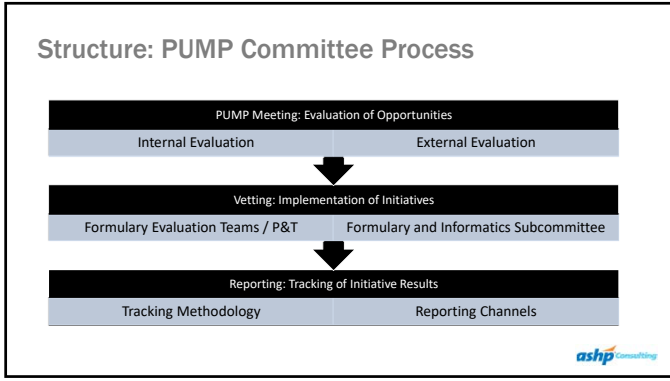


Strategic Approach to Drug Spend

- Drug Pricing
 - Identifying "Top 200"
 - Contracting Implications
 - Minimizing WAC spend
- Operations
 - Purchasing vs. utilization ("waste factor")
 - Prioritizing operations projects
- Formulary Management
 - Biosimilars
 - Dosing and utilization guidelines
 - Formulary addition requests







Collaboration with Pharmacy and Medical Staff

- Formulary Evaluation Team Model
 - Clinical pharmacist and attending physician serve as the two co-chairs
 - Other clinical pharmacists and physicians across health system are voting members
- Support from Physicians
 - Built-in credibility
 - Keeping quality and patient outcomes as the main focus
 - Support and education around recently implemented or in-progress initiatives
- Promotion of PUMP Initiatives
 - Therapeutic interchange programs
 - Enforcement of restrictions or dosing guidelines



Engagement of Front-Line Pharmacy Staff

- Consistent Communication
 - Operations Initiatives:
 - Provide rationale for any process changes
 - Formulary Management Projects:
 - Hardwiring into verification workflows
- Expected Job Results
 - Components of yearly evaluation for pharmacy staff
 - “Financial Quadrant” of the Pharmacy Department Balanced Scorecard
 - Percentage formulary compliance post-verification
 - Total savings associated with PUMP initiatives




PUMP Meetings

- Meet on monthly basis for one hour
- Committee members includes
 - Pharmacy leadership at system hospitals
 - Chief Pharmacy Officers
 - Associate Chief Pharmacy Officers
 - Clinical and Operational Pharmacy Managers
 - Pharmaceutical Contracting and Procurement
 - Center for Medication Policy

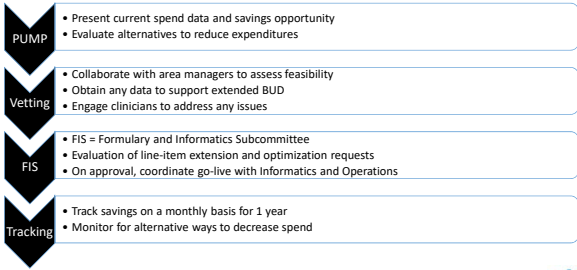


Projects and Opportunities Reviewed


- Tracking Document Review
- Drug Pricing
 - WAC expenditures and GPO opportunity
 - Pricing changes or vendor offers
- Operations
 - Repackaging opportunities
 - Compounding projects
- Formulary Management
 - Utilization trends and benchmarking
 - MUEs
 - Drug class reviews



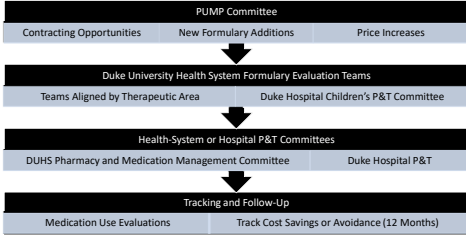
Operations Initiative Workflow



- PUMP**
 - Present current spend data and savings opportunity
 - Evaluate alternatives to reduce expenditures
- Vetting**
 - Collaborate with area managers to assess feasibility
 - Obtain any data to support extended BUD
 - Engage clinicians to address any issues
- FIS** (FIS = Formulary and Informatics Subcommittee)
 - Evaluation of line-item extension and optimization requests
 - On approval, coordinate go-live with Informatics and Operations
- Tracking**
 - Track savings on a monthly basis for 1 year
 - Monitor for alternative ways to decrease spend




Formulary Initiative Workflow



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    graph TD
      A["PUMP Committee  
Contracting Opportunities | New Formulary Additions | Price Increases"] --> B["Duke University Health System Formulary Evaluation Teams  
Teams Aligned by Therapeutic Area | Duke Hospital Children's P&T Committee"]
      B --> C["Health-System or Hospital P&T Committees  
DUHS Pharmacy and Medication Management Committee | Duke Hospital P&T"]
      C --> D["Tracking and Follow-Up  
Medication Use Evaluations | Track Cost Savings or Avoidance (12 Months)"]
    
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Hardwiring PUMP Initiatives Into Workflows

The screenshot displays a software interface with a sidebar on the left and a main content area on the right. The sidebar contains a 'PUMP' section with a '40% decrease in bivalirudin purchasing' highlighted in red. The main content area shows a 'PUMP' section with a '40% decrease in bivalirudin purchasing' highlighted in red. The ASHP Consulting logo is visible in the bottom right corner.

Benefits on Quality and Efficiency

- Provides a formal, systematic process for:
 - Identifying opportunities within department
 - Implementing cost savings initiatives
 - Measuring progress after go-live
- Framework to specifically describe successes to hospital and health system leadership
- Foundation to engage and collaborate with hospital and health system leadership on targeted projects

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Organizational Commitment

- Support from departmental leadership
 - Setting and defining goals associated with program
- Partnership with other health-system pharmacy stakeholders
- Integration of activities into formulary / P&T process
 - Benefits of medication policy pharmacists
- Leveraging clinical decision support with the EHR
- Champions among physician and institutional leadership

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When Determining Metrics For Tracking

- What is the anticipated impact?
 - Cost savings vs. cost avoidance
- What methodology to use?
 - Total spend for medication(s) within initiative
 - Broader basis: Inpatient drug spend/day
 - Initiative-dependent:
 - Contracting and Pricing: Cost per unit
 - Waste Minimization: Total units purchased
 - Formulary: May influence either
- Importance of consistency and transparency



Accountability and Tracking

- PUMP Meeting: Expected cost savings generated
- Initiative Assigned to Group Based on Project Type
 - Drug Pricing: Contracting and procurement
 - Operations: Manager(s) over affected area(s)
 - Formulary: Formulary evaluation team -> clinical staff
- Each initiative is tracked monthly for 12 months



Example of Tracking Initiative

	A	B	C	D
1	Switch to Epoetin Alfa Biosimilar (Karscent) Inpatients			
2	Metric: Change in Average Inpatient ESA Spend per Month	Total Cost	Total Cost/Month	Difference from Average
3	Month (Baseline Period)	\$2,000,000.00	\$166,666.67	
4	November 2018 - October 2019			
5	Post Implementation			
6		Nov-19	\$95,000.00	(\$171,666.67)
7		Dec-19	\$95,000.00	(\$161,666.67)
8		Jan-20	\$93,000.00	(\$173,666.67)
9		Feb-20	\$90,000.00	(\$176,666.67)
10		Mar-20	\$92,000.00	(\$174,666.67)
11		Apr-20	\$88,000.00	(\$178,666.67)
12		May-20	\$91,000.00	(\$175,666.67)
13		Jun-20	\$87,000.00	(\$179,666.67)
14		Jul-20		
15		Aug-20		
16		Sep-20		
17		Oct-20		
18				
19	TOTAL COST DIFFERENCE			(\$612,333.36)
20				
21				



Key Takeaways: PUMP

- Requirements for Success:
 - Robust medication policy program within department
 - Integration of initiatives into formulary evaluation process
 - Development of and collaboration with physician champions
 - Support from departmental leadership across the health system
 - Promote engagement of front-line staff (both operations and clinical)
 - Leveraging clinical decision support to facilitate adherence to PUMP initiatives
 - Concise and consistent tracking mechanism to monitor progress
 - Establish reporting channels to hospital and health system senior leadership
 - Maintain credibility by keeping quality and patient outcomes the main focus



Q & A

